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KEVIN L. RUSSELL
CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP
1600 ODS TOWER
601 SW SECOND AVENUE
PORTLAND, OR 97204

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| EXAMINER |
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SANDERS, AARON J

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2168

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10/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/058,869 | Applicant(s) VAN BEEK ET AL. | |
| | Examiner AARON SANDERS | Art Unit 2168 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-20 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/25/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed 30 July 2008 has been entered. Claims 2-20 and 23-26 are pending. Claims 1, 9, 15, and 23-26 are currently amended. Claims 1, 21-22, and 27-30 are cancelled. No claims are new. This action is FINAL, as necessitated by amendment.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “description scheme[s]” of claims 9, 15, 21, 25-28, and 30 must be shown or the feature(s) canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

As per claim 2, the phrase “said searching attributes interacts” is grammatically incorrect. It should be “attributes interact.”

As per claims 9, 15, and 23-26, the phrase “is capable of” is indefinite because it does not require that the steps following it actually be performed.

As per claims 9, 15, and 23-26, it is not clear what limitations (iii) and (iv) modify. Limitation (b) (or (c) in claims 25-26) states that “one of both” of (i)-(iv) are selected, but there are four options, not two like “both” implies. It appears that Applicant intended (iii) and (iv) to modify (ii), in which case they should not have been numbered (iii) and (iv).

As per claim 15, the phrase “a group of at least one single segment said video” is grammatically incorrect. It should be “segment of said video.”

As per claims 25-26, the phrase “selectively, alternatively” is unclear. It may be that Applicant means the description scheme may be selectively and/or alternatively characterized, but this is not clear, nor is it clear if it should be “and” or “or.”

Claim Rejections - 35 USC § 112 – First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 9, 15, and 23-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 9 and 15, the limitation “each of said single segment information description scheme and said segment group information description scheme are interactively accessible to a user through said audiovisual device” does not appear in the specification.

As per claims 9, 15, and 23-26, the limitation “said single segment information description scheme is constrained to identify one and only one segment of said video” does not appear in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 15, and 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 9, 15, and 23-26, the phrase “identifying either selective one of both” is incomprehensible. It appears from p. 22 of the specification that it means one of the other but not both. It is not clear, however, that this is what Applicant intended to claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-20 and 25-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 9-20 and 25-26 lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable storage medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming nonfunctional descriptive material, here a data structure, stored on a computer-readable storage medium, in a computer, or on an electromagnetic carrier signal, does not make the claims statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole

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practical application of the algorithm was in connection with the programming of a general purpose computer.”). Rather, the disclosed data structure must be “a physical or logical relationship among data elements, designed to support specific data manipulation functions” (*The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition*, IEEE Press, 2000).

Here, while the claimed “description scheme” may be a data structure, it is not embodied on hardware. As such, it is non-functional descriptive material, making the instant claims non-statutory. See MPEP 2106.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Qian et al., “Description Schemes for Consumer Video Applications,” ISO/IEC JTC1/SC29/WG11 – MPEG-7 Proposal, February 1999 (Qian).

9. Qian teaches “*A segmentation description scheme related to video presented by an audiovisual device, said segmentation description scheme comprising,*” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “*(a) a single segment information description scheme where said single segment information description scheme is constrained to identify one and only one segment of*

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said video,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “*and (b) a segment group information description scheme where said segment group information description scheme is capable of identifying either selective one of both,*” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “segment group information description scheme” is the referenced “<Events name=“”>.”

Qian teaches “*(i) at least one single segment information description scheme; and (ii) at least one other segment group information description scheme but is constrained against identifying both (iii) at least one single segment information description scheme; and (iv) at least one other segment group information description scheme,*” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one single segment information description scheme” is one of the referenced <Clip>’s.

Qian teaches “*each of said single segment information description scheme and said segment group information description scheme are interactively accessible to a user through said audiovisual device,*” see § 3.1, “The proposed program description scheme includes three major sections for describing a video program... The second section defines a number of views which may be useful in browsing applications,” where the claimed “accessib[ility]” is the referenced “browsing.”

10. Qian teaches “*The segmentation description scheme of claim 9 wherein said segment group information description scheme identifies a plurality of said single segment information description schemes,*” see § 3.1.2, “The descriptor <EventView> specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute.”

11. Qian teaches “*The segmentation description scheme of claim 9 wherein said segment group information description scheme identifies a plurality of said other segment group information description schemes,*” see § 3.1.2, “<EventView> <Events name=“”>...</Events> <Events name=“”>...</Events>,” where the claimed “at least one other segment group information description scheme” is at least one of the referenced “<Events>.”

12. Qian teaches “*The segmentation description scheme of claim 9 wherein said segment group information description scheme identifies one and only one said single segment information description scheme,*” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>.”

13. Qian teaches “*The segmentation description scheme of claim 9 wherein said single segment information description scheme identifies the content of said video,*” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “content” is the referenced “start-frame-id end-frame-id display-frame-id.”

14. Qian teaches “*The segmentation description scheme of claim 9 wherein said single segment information description scheme identifies the location of said video,*” see § 3.1.2,

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“<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “location” is the referenced “id.”

15. Qian teaches “*A segmentation description scheme related to video presented by an audiovisual device, said segmentation description scheme comprising,*” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “*(a) a single segment information description scheme where said single segment information description scheme is constrained to identify one and only one segment of said video,*” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “*and (b) a segment group information description scheme where said segment group information description scheme is capable of identifying either selective one of both,*” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “segment group information description scheme” is the referenced “<Events name=“”>.”

Qian teaches “*(i) a group of at least one single segment said video; and (ii) at least one other subgroup of segments contained within said group; but is constrained against identifying both: (iii) a group of at least one single segment said video; and (iv) at least one other subgroup of segments contained within said group,*” see § 3.1.2, “<EventView> <Events name=“”>...</Events> <Events name=“”>...</Events>,” where the claimed “group of segments” is at least one of the referenced “<Events>.”

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Qian teaches “*each of said single segment information description scheme and said segment group information description scheme are interactively accessible to a user through said audiovisual device,*” see § 3.1, “The proposed program description scheme includes three major sections for describing a video program... The second section defines a number of views which may be useful in browsing applications,” where the claimed “accessib[ility]” is the referenced “browsing.”

16. Qian teaches “*The segmentation description scheme of claim 15 wherein said group of segments is comprised of a plurality of said single segments of said video,*” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

17. Qian teaches “*The segmentation description scheme of claim 15 wherein said segment group information description scheme identifies a plurality of said other subgroups of segments,*” see § 3.1.2, “<EventView> <Events name=“”>...</Events> <Events name=“”>...</Events>.”

18. Qian teaches “*The segmentation description scheme of claim 15 wherein said group of segments is comprised of one and only one of said single segments of video,*” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>.”

19. Qian teaches “*The segmentation description scheme of claim 15 wherein said single segment information description scheme identifies the content of said video,*” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id

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</Clip>,” where the claimed “content” is the referenced “start-frame-id end-frame-id display-frame-id.”

20. Qian teaches “*The segmentation description scheme of claim 15 wherein said single segment information description scheme identifies the location of said video,*” see § 3.1.2,

“<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “location” is the referenced “id.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qian et al., “Description Schemes for Consumer Video Applications,” ISO/IEC JTC1/SC29/WG11 – MPEG-7 Proposal, February 1999 (Qian), in view of Wallace et al., U.S. 2002/0108112 (Wallace).

2. Qian teaches “*A description scheme related to at least one of video and audio presented by an audiovisual device, said description scheme comprising,*” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “*(a) searching attributes where said searching attributes interacts with said audiovisual device to enable searching of the content of said at least one of video and audio,*”

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see § 2, “For a given video program, we propose a *program description scheme* which... establishes distinctive characteristics to enable filtering and search. We term the... established characteristics as *program profiles*... Typical program profiles include a) general profile, b) category profile, c) time profile, d) keyword profile, e) token profile, f) event profile, g) character profile, and h) object profile,” where the claimed “searching attributes” are the referenced “program profiles.”

Qian teaches “(b) *navigation attributes where said navigation attributes interacts with said audiovisual device to enable selection of a segment of said at least one of video and audio*,” see § 2, “For a given video program, we propose a *program description scheme* which a) defines logical structures to facilitate browsing... We term the defined logical structures as *program views*... Typical program views include a) thumbnail view, b) slide view, c) frame view, d) shot view, e) key-frame view, f) highlight view, g) event view, and h) close-up view,” where the claimed “navigation attributes” are the referenced “program views.”

Qian teaches “and (c) *wherein said searching attributes and navigation attributes are within a single description scheme*,” see § 2, “For a given video program, we propose a *program description scheme* which a) defines logical structures to facilitate browsing and b) establishes distinctive characteristics to enable filtering and search,” where the claimed “single description scheme” is the referenced “program description scheme.” Qian does not explicitly teach “*that links segments selectable using said navigation attributes with content searchable with said searching attributes*.” Wallace does, however, see Fig. 6 and par. 38, “The playlist submenu 46 lists the video segment groupings associated with the theme selected in menu 40... The segment submenu 50 has listed thereon a plurality of segments 52a, 52b, and 52c appropriate to the theme

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and playlist,” where the claimed “searching attributes” are part of the referenced “theme,” see par. 27, “As thematic attributes are created and labeled, they are assigned to classes or sets, each of which represents one on-going analytical feature of the work.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Wallace’s teachings would have allowed Qian’s data structure to browse a video file by theme, see par. 15.

3. Qian teaches “*The description scheme of claim 2 wherein said description scheme may be used in a manner such that said segments are viewed by a viewer,*” see § 3.1.2, “The descriptor <HighlightView> specifies clips to form highlights of a program” and § 1, “You start interacting with the appliance... The appliance... invokes your user profile (which is indeed different than your spouse’s and children) to customize your viewing experience and anticipate your needs.”

4. Qian teaches “*The description scheme of claim 2 wherein said description scheme may be used in a manner such that each of said segments may be viewed by a viewer and includes a plurality of frames,*” see § 3.1.2, “<HighlightView> <Highlight length=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>... The descriptor <HighlightView> specifies clips to form highlights of a program.”

5. Qian teaches “*The description scheme of claim 2 wherein descriptions that conform to said description scheme are in XML format,*” see § 3.1, “<?XML version=“1.0”>.”

6. Qian teaches “*The description scheme of claim 2 wherein said navigation attributes enables selection of a plurality of said segments,*” see § 3.1.2, “The descriptor <EventView>

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specifies clips which are related to certain events in a program. The clips are grouped into the corresponding events which are specified by the descriptor <Event> with a name attribute.”

7. Qian teaches “*The description scheme of claim 2 wherein each of said segments defines a plurality of frames that are contiguous in time,*” see § 3.1.2, “<HighlightView> <Highlight length=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>.”

8. Qian teaches “*The description scheme of claim 2 wherein each of said segments defines a plurality of frames that belong to a single said video,*” see § 3.1.2, “<HighlightView> <Highlight length=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>.”

Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qian et al., “Description Schemes for Consumer Video Applications,” ISO/IEC JTC1/SC29/WG11 – MPEG-7 Proposal, February 1999 (Qian), in view of Yeo et al., “Retrieving and Visualizing Video,” Communications of the ACM, December 1997 (Yeo).

23. Qian teaches “*A table of contents related to video, said table of contents comprising,*” see § 3.1.2, “The key frames may be organized in a hierarchical manner and the hierarchy is captured by the descriptor <KeyFrames> with a level attribute.”

Qian teaches “*(a) a single segment information description scheme where said single segment information description scheme is constrained to identify one and only one segment of said video,*” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

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Qian teaches “(b) a segment group information description scheme where said segment group information description scheme is capable of identifying either selective one of both,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “segment group information description scheme” is the referenced “<Events name=“”>.”

Qian teaches “(i) at least one single segment information description scheme each referencing a single segment video; and (ii) at least one other segment group information description scheme each referencing a group of segments, but where said segment group information description scheme is constrained against identifying both (iii) at least one single segment information description scheme; and (iv) at least one other segment group information description scheme,” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one other single segment information description scheme” is at least one of the referenced “<Clip>.”

Qian does not teach “and (c) wherein said table of contents includes a hierarchical representation of the interrelationship of said single segments of video and said groups of segments, where the hierarchical representation is viewable by a viewer through an audiovisual device.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “segments” are the referenced “shots.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s

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teachings would have allowed Qian's method to gain the ability to easily "identify meaningful segments of video to serve as retrievable units," see p. 46.

24. Qian teaches "*A table of contents related to video, said table of contents comprising,*" see § 3.1.2, "The key frames may be organized in a hierarchical manner and the hierarchy is captured by the descriptor <KeyFrames> with a level attribute."

Qian teaches "*(a) a single segment information description scheme where said single segment information description scheme is constrained to identify one and only one segment of said video,*" see § 3.1.2, "<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>," where the claimed "single segment information description scheme" is the referenced "<Clip>."

Qian teaches "*(b) a segment group information description scheme where said segment group information description scheme is capable of identifying either selective one of both,*" see § 3.1.2, "<EventView> <Events name=""> <Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>," where the claimed "segment group information description scheme" is the referenced "<Events name="">."

Qian teaches "*(i) at least one single segment information description scheme; and (ii) at least one other segment group information description scheme but is constrained against identifying both (iii) at least one single segment information description scheme; and (iv) at least one other segment group information description scheme,*" see § 3.1.2, "<EventView> <Events name=""><Clip id=""> start-frame-id end-frame-id display-frame-id </Clip>," where the claimed "at least one other single segment information description scheme" is at least one of the referenced "<Clip>."

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Qian does not teach “*and (c) wherein said table of contents includes a hierarchical representation of the interrelationship of said single segment information description schemes and said segment group information description schemes, where the hierarchical representation is viewable by a viewer through an audiovisual device.*” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “description schemes” are the referenced “attributes.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

25. Qian teaches “*A description scheme related to video comprising,*” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “*(a) a single segment information description scheme where said single segment information description scheme is constrained to identify one and only one segment of said video,*” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “*(b) a first segment group information description scheme where said first segment group information description scheme identifies at least two other segment group*

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information description schemes, wherein each of said other segment group information description schemes characterize the same content of said video in a different manner,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>,” where the claimed “segment group information description scheme” is the referenced “<EventProfile>” and the referenced “at least two other subgroups” are the referenced “<Duration>... <Text>... <Audio>” tags.

Qian teaches “(c) a second segment group information description scheme where said second segment group information description scheme is capable of identifying either selective one of both,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “segment group information description scheme” is the referenced “<Events name=“”>.”

Qian teaches “(i) at least one single segment information description scheme; and (ii) at least one other segment group information description scheme but is constrained against identifying both (iii) at least one single segment information description scheme; and (iv) at least one other segment group information description scheme,” see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one other single segment information description scheme” is at least one of the referenced “<Clip>.”

Qian teaches “(e) wherein said description scheme may be characterized in the manner of subsection (b) or subsection (d), but not both,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>.”

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Qian does not teach “(d) wherein said second segment group information description scheme includes a hierarchical representation of the interrelationship of said identified said single segment information description schemes and identified said segment group information description schemes, where the hierarchical representation is viewable by a viewer through an audiovisual device.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “description schemes” are the referenced “attributes.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

26. Qian teaches “A description scheme related to video comprising,” see § 2, “We propose three description schemes to support the following functionalities: efficient browsing of audiovisual information.”

Qian teaches “(a) a single segment information description scheme where said single segment information description scheme is constrained to identify one and only one segment of said video,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “single segment information description scheme” is the referenced “<Clip>.”

Qian teaches “(b) a segment group information description scheme where said segment group information description scheme identifies at least two other subgroups of segments,

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wherein each of said other subgroups characterize the same content of said video in a different manner,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>,” where the claimed “segment group information description scheme” is the referenced “<EventProfile>” and the referenced “at least two other subgroups” are the referenced “<Duration>... <Text>... <Audio>” tags.

Qian teaches “(c) a second segment group information description scheme where said second segment group information description scheme is capable of identifying either selective one of both,” see § 3.1.2, “<EventView> <Events name=“”> <Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “segment group information description scheme” is the referenced “<Events name=“”>.”

Qian teaches “(i) a group of segments comprised of at least one single segment of said video; (ii) at least one other subgroup of segments contained within said group but is constrained against identifying both (iii) a group of segments comprised of at least one single segment of said video; and (iv) at least one other subgroup of segments contained within said group,” see § 3.1.2, “<EventView> <Events name=“”>...</Events> <Events name=“”>...</Events>,” where the claimed “group of segments” is at least one of the referenced “<Events>.”

Qian teaches “and (e) wherein said description scheme may be selectively, alternatively characterized in the manner of subsection (b) or subsection (d), but not both,” see § 3.1.3, “<EventProfile>... <Duration> start-frame-id end-frame-id </Duration> <Text> text-annotation </Text> <Audio> voice-annotation </Audio>.”

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Qian does not teach “(d) wherein said second group information description scheme includes a hierarchical representation of the interrelationship of said single segments of video and said groups of segments, where the hierarchical representation is viewable by a viewer through an audiovisual device.” Yeo does, however, see Fig. 2 and p. 46, “The fundamental unit of video production is a shot, captured between a record and a stop camera operation. A scene is the next level of the hierarchy. In film terms, a scene is a sequential collection of shots unified by a common event or locale. A clip can have one scene or several scenes,” where the claimed “segments” are the referenced “shots.” Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Yeo’s teachings would have allowed Qian’s method to gain the ability to easily “identify meaningful segments of video to serve as retrievable units,” see p. 46.

Response to Arguments

As per Applicant’s argument that 9-20 and 25-26 are statutory under 35 U.S.C. 101, the Examiner respectfully disagrees. While the claimed “description scheme” may be a data structure, it is not embodied in hardware. As such, it is non-functional descriptive material, making the instant claims non-statutory. See MPEP 2106.01.

As per Applicant’s argument that Qian does not teach “a single description scheme that links segments selectable using said navigation attributes with content searchable with said searching attributes,” the Examiner respectfully disagrees. While Qian does not explicitly disclose “linking,” the Examiner believes it is inherent in the reference. First, the browsing example in Qian’s Introduction (pp. 2-3) requires the program views and program profiles to be

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linked to each other. They would be useless if they weren't linked together. Second, Fig. 2 shows that the program views and program profiles are linked via the program description. Finally, the program profiles by themselves read on the claimed "single description scheme" since, for example, the event profile on p. 9 contains "searching attributes," i.e. at least the event name and text tags, and the "navigation attributes," i.e. at least the duration tag.

Even though the Examiner believes Qian inherently teaches the claimed limitations, the Examiner has cited Wallace as teaching "*a single description scheme that links segments selectable using said navigation attributes with content searchable with said searching attributes*" explicitly. Specifically, the Examiner cited Fig. 6 and par. 38, "The playlist submenu 46 lists the video segment groupings associated with the theme selected in menu 40... The segment submenu 50 has listed thereon a plurality of segments 52a, 52b, and 52c appropriate to the theme and playlist," where the claimed "searching attributes" are part of the referenced "theme," see par. 27, "As thematic attributes are created and labeled, they are assigned to classes or sets, each of which represents one on-going analytical feature of the work." Thus, it would have been obvious to one of ordinary skill in the database art at the time of the invention to combine the teachings of the cited references because Wallace's teachings would have allowed Qian's data structure to browse a video file by theme, see par. 15.

As per Applicant's argument that Qian does not teach "*a segment group information description scheme where said segment group information description scheme is capable of identifying either selective one of both: (i) at least one single segment information description scheme; and (ii) at least one other segment group information description scheme but is constrained against identifying both (iii) at least one single segment information description*

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scheme; and (iv) at least one other segment group information description scheme,” the Examiner respectfully disagrees. The phrase “identifying either selective one of both” is incomprehensible. The Examiner’s best interpretation is that it means that the “segment group information description scheme” identifies either element (i) or (ii). Elements (iii) and (iv) are also ambiguous, but appear to be part of element (ii). Thus, so long as the reference teaches limitation (i) or (ii), it anticipates the claim. Here, Qian teaches at least limitation (i), see § 3.1.2, “<EventView> <Events name=“”><Clip id=“”> start-frame-id end-frame-id display-frame-id </Clip>,” where the claimed “at least one single segment information description scheme” is at least one of the referenced “<Clip>” and is contained in a “segment group information description scheme,” i.e. the referenced “<Events name=“”>.”

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Sanders whose telephone number is 571-270-1016. The examiner can normally be reached on M-F 9:00a-4:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tim T. Vo/
Supervisory Patent Examiner, Art Unit
2168

/Aaron Sanders/
Examiner, Art Unit 2168
22 October 2008